CLAIMS

1. A pharmaceutical composition for stabilizing vulnerable plaques in blood vessels of a subject in need of such a stabilization, for preventing or treating restenosis in diabetic patients, or for the prevention or reduction of vascular access dysfunction in association with the insertion or repair of an indwelling shunt, fistula or catheter in a subject in need of a dialysis, comprising rapamycin or a derivative thereof having mTOR properties, together with one or more pharmaceutically acceptable diluents or carriers therefor.

2. Use of rapamycin or a derivative thereof having mTOR inhibiting properties for the manufacture of a pharmaceutical for stabilizing vulnerable plaques in blood vessels of a subject in need of such a stabilization, for preventing or treating restenosis in diabetic patients, or for the prevention or reduction of vascular access dysfunction in association with the insertion or repair of an indwelling shunt, fistula or catheter in a subject in need of dialysis.

3. Use or composition according to claim 1 or 2, for use in conjunction with one or more active co-agents.

4. A drug delivery device or system comprising i) a medical device adapted for local application or administration in hollow tubes and ii) a therapeutic dosage of a rapamycin derivative having mTOR inhibiting properties or rapamycin, in conjunction with a therapeutic dosage of one or more active co-agents selected from an EDG-receptor agonist having lymphocyte depleting properties, a cox-2 inhibitor, pimecrolimus, a cytokine inhibitor, a chemokine inhibitor, an antiproliferative agent, a statin, a protein, growth factor or compound stimulating growth factor production that will enhance endothelial regrowth of the luminal endothelium, a matrix metalloproteinase inhibitor, a somatostatin analogue, an aldosterone synthetase inhibitor or aldosterone receptor blocker and a compound inhibiting the renin-angiotensin system,

each being releasably affixed to the drug delivery device or system.

5. A drug delivery device or system comprising i) a medical device adapted for local application or administration in hollow tubes and ii) a therapeutic dosage of a rapamycin derivative having mTOR inhibiting properties, in conjunction with a therapeutic dosage of one

or more active co-agents selected from a calcineurin inhibitor and mycophenolic acid or a salt thereof or prodrug thereof,

each being releasably affixed to the drug delivery device or system.

6. A drug delivery device or system according to claim 4 or 5, for preventing or treating smooth muscle cell proliferation and migration in hollow tubes, or increased cell proliferation or decreased apoptosis or increased matrix deposition in a subject in need thereof.

7. A drug delivery device or system according to claim 4 or 5, for stabilizing vulnerable plaques in blood vessels, for preventing or treating restenosis in diabetic patients or for the prevention or reduction of vascular access dysfunction in association with the insertion or repair of an indwelling shunt, fistula or cathether in a dialysis patient.

8. A drug delivery device or system comprising i) a medical device adapted for local application or administration in hollow tubes and ii) a therapeutic dosage of a rapamycin derivative having mTOR inhibiting properties or rapamycin, each being releasably affixed to the catheter-based delivery device or system, for use in stabilizing vulnerable plaques in blood vessels, for preventing or treating restenosis in diabetic patients or for the prevention or reduction of vascular access dysfunction in association with the insertion or repair of an indwelling shunt, fistula or cathether in a dialysis patient.

9. A combination of rapamycin or a rapamycin derivative having mTOR inhibiting properties with pimecrolimus, an aldosterone synthetase inhibitor or an aldosterone receptor blocker, or with a compound inhibiting the renin-angiotensin system.

10. A method for preventing or treating smooth muscle cell proliferation and migration in hollow tubes, or increased cell proliferation or decreased apoptosis or increased matrix deposition in a subject in need thereof, comprising local administration of a therapeutically effective amount of a rapamycin derivative having mTOR inhibiting properties or rapamycin in conjunction with one or more active co-agents selected from an EDG-receptor agonist having lymphocyte depleting properties, a cox-2 inhibitor, pimecrolimus, a cytokine inhibitor, a chemokine inhibitor, an antiproliferative agent, a statin, a protein, growth factor or compound stimulating growth factor production that will enhance endothelial regrowth of the luminal endothelium, a matrix metalloproteinase inhibitor, a somatostatin analogue, an aldosterone synthetase inhibitor or aldosterone receptor blocker and a compound inhibiting the renin-angiotensin system.

11. A method for stabilizing vulnerable plaques in blood vessels of a subject in need of such a stabilization comprising the controlled delivery from a drug delivery device or system of a therapeutically effective amount of rapamycin or a rapamycin derivative having mTOR inhibiting properties, optionally in conjunction with one or more active co-agents.

12. A method for preventing or treating restenosis in diabetic patients comprising administering to said patients a therapeutically effective amount of rapamycin or a rapamycin derivative having mTOR inhibiting properties, optionally in conjunction with one or more active co-agents, or the controlled delivery from a drug delivery device or system of a therapeutically effective amount of rapamycin or a rapamycin derivative having mTOR inhibiting properties, optionally in conjunction with one or more active co-agents.

13. A method for the prevention or reduction of vascular access dysfunction in association with the insertion or repair of an indwelling shunt, fistula or catheter, or actual treatment, in a subject in need thereof, which comprises administering to the subject rapamycin or a rapamycin derivative having mTOR inhibiting properties, optionally in conjunction with one or more active co-agents, or a controlled delivery from a drug delivery medical device or system of a therapeutically effective amount of rapamycin or a rapamycin derivative having mTOR inhibiting properties, optionally in conjunction with one or more other active co-agents.